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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/537,773	03/29/2000	Yoshifumi Shibata	15162/01740	7266

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EXAMINER	
PATEL, NITIN	

ART UNIT	PAPER NUMBER
2673	20

DATE MAILED: 06/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/537,773	SHIBATA ET AL.	
	Examiner	Art Unit	
	Nitin Patel	2673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-29* is/are pending in the application.

4a) Of the above claim(s) *2,3 and 6-18* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4,5 and 19-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1,4,5,19 –29 have been elected based upon restriction given on paper No.19.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1,4,5,19-29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Masazumi (U.S. Patent No. 6,414,669) in view of Inoue et al., (U.S. patent No. 5,990,859).

As per claim 1, Masazumi shows an information display apparatus having a liquid crystal display (element 100In fig.1 and In col.4 lines 1-30; a liquid crystal material (In col.4 lines 5-100, a plurality of scan electrodes and a plurality of data electrodes (In fig.4 and In col.10 lines 35-450, the liquid crystal material exhibiting at room temperature (In col.5 lines 58-61), a cholesteric phase in which the liquid crystal material has a bistability between a focal conic state and planar state in which liquid crystal material exhibits a selective reflection characteristic(In col.5 lines 21-34 and lines 48-57 and 62-67 and Col.6 lines 13-35 and Col.7 lines 3-33) , the scan electrode and data electrodes defining a plurality of liquid crystal pixels(In fig.4 element Lc1-1...Lcm-n); a driver having a scan electrode driver and a data electrode driver(in fig.4 element 200 and 201) and scan electrode driver including shift register and a plurality of output terminals

respectively(In Fig.22 element 211 and In col.20 lines 1-7) connected to the scan electrode and data driver including a shift register and a plurality of output terminals respectively connected to the data electrodes to drive the liquid crystal display (In Fig.23 element 221 and 224).

Masazumi does not show a controller which is connected to the driver, the controller being capable of controlling the driver to repeatedly select only part of scan electrodes by controlling the shift register of the scan electrodes driver to perform writing on only part of the pixels of the liquid crystal display corresponding to the selected scan electrodes. Inoue shows a controller (In fig.1 element 14 and In col.4 lines37-40) which is connected to the driver, the controller being capable of controlling the driver to repeatedly select only part of scan electrodes by controlling the shift register of the scan electrodes driver to perform writing on only part of the pixels of the liquid crystal display corresponding to the selected scan electrodes (In col.8 lines 18-27 and lines 35-47 and lines 52-67 and In Col.9 lines 1-14).

It would have been obvious to one of ordinary skill in the art, at the time of the invention was made to combined the teaching of Inoue's controller to select part of scan electrodes into display system of Masazumi's because it would have sends modified display data to a display panel to modify a display content.

As per claim 4,5 Masazumi does not show a controller control motion picture data and controller sends data regarding a writing line and a writing end line to driver.

Inoue shows a controller a controller control motion picture data and controller sends data regarding a writing line and a writing end line to driver (in col.5 lines 13-30

and In col.7 lines 5-22 and lines 40-55 and In col.8 lines 19-29 and lines 51-67). It would have been to one of ordinary skill in the art, at the time of the invention was made to use the teaching of Inoue's into display system of Masazumi's because it would have pixel to be written belong are scanned in the partial writing of the screen so that the partial writing is attained without changing the other potion of the screen.

As per claims 19,20 Masazumi does not teach driver is selecting plurality of parts of scan electrodes repeatedly to perform repetitious writing on a parts of the LCD corresponding to the selected scan electrodes and repetitious is smaller than the a non selected part of the LCD. Inoue shows selecting plurality of parts of scan electrodes repeatedly to perform repetitious writing on a parts of the LCD corresponding to the selected scan electrodes and repetitious is smaller than the a non selected part of the LCD (In col.10 lines 18-34 and In col.8 lines 35-50 and col.9 lines 1-10). It would have been obvious to one of ordinary skill in the art, at the time of the invention was made to combined the teaching of Inoue's into display system of Masazumi's because it would have response speed would have increased and power consumption would have reduced.

As per claims 21,22,23 Masazumi does not teach repetitious on the selected part of the liquid crystal display is performed using a memory effect of the liquid crystal display and writing on an LCD display at specific interval. Inoue's shows repetitious on the selected part of the liquid crystal display is performed using a memory effect of the liquid crystal display and writing on an LCD display at specific interval (In Col.9 lines 20-35 and In col.10 lines 1-25) and number of scan electrodes is less than a limit within a

display (In fig.15 and 16). It would have been obvious to one of ordinary skill in the art, at the time of the invention was made to combined the teaching of Inoue's with display system of Masazumi's because it would have maintain video data in memory even after the signal line of the driver has been blocked and can changed only a portion of the image by applying the drive signals.

As per claims 24,25 Masazumi shows the liquid crystal display material is a mixture of nematic with chiral agent of the liquid crystal material to exhibit a cholestric phase (In col.5 lines 35-67).

As per claims 26,27 Masazumi shows the liquid crystal display makes a full color display and a monochromatic display (In col.4 lines 50-54).

As per claim 28, Masazumi shows plurality of liquid crystal layers concurrently (In Col.4 lines 42-52).

As per claim 29, Masazumi does not show the part of the liquid crystal display to be selected for repetitious writing is variable with respect to position and size. Inoue shows the part of the liquid crystal display to be selected for repetitious writing is variable with respect to position and size (In Col.7 lines 35-55). It would have been to one of ordinary skill in the art, at the time of the invention was made to combined the teaching of Inoue's into display system of Masazumi's because it would have reduced power consumption in a display device.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nitin Patel whose telephone number is 703-308-7024. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin H Shalwala can be reached on 703-305-4938. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

June 1, 2004

VIJAY SHANKAR
PRIMARY EXAMINER